GAM RNA SEQUENCE	VALIDATION METHOD	SIGNAL	BACKGROUND	Z-SCORE	MISMATCH Z-SCORE	GAM RNA SEQ-ID
ACTCACTGCAACCTCCACCTCC	Sequenced					323
ACTGCACTCCAGCCTGGGCTAC	Sequenced					13
AATCACTTGAACCCAAGAAGTG	Sequenced					5
AATCGCTTGAACCCAGGAAGTG	Sequenced					6
TTCAAGTGTTTAAGTTCTGCTT	Sequenced					305
AGGCAGAGAGGACCAGAGACT	Sequenced					331
CACTGCACTCCAGCCCGAGCAA	Sequenced					46
CCCGGGTGGAGCCTGGGCTGTG	Sequenced					361
GGGCGTGGAGCTGGAATGATGT	Sequenced					125
TGATAGATCCATATTTTGGTAA	Sequenced					279
AGCAAGACCAGGGTTTTGTGTT	Sequenced					326
TCACTGCAACCTCCACCTCCCA	Sequenced					198
ATTGTTGCCCATGTTTTTATTT	Sequenced					40
CTGGACTGAGCTCCTTGAGGCC	Sequenced					383
AGGCCAAGAAGGAAGCAGAGG	Sequenced					25
ATTAGGAGAGTGGGTGCTAAGT	Sequenced					38
AGTTTGTGTAAGAAAAGC	Sequenced					338
AGGAAAAAAATTAATGTGAGTC	Sequenced					22
TCACTGCAACCTCCACCAGCCT	Sequenced					197
GTGACAGTGAATCTAGACAGAC	Sequenced					134
TATTCATTGCCCATGTTTGTGA	Sequenced					262
TGGGTTTTGTTTGTACAGTGTA	Sequenced					229
CTCAGCTCATCCACTAAATCCC	Sequenced					377
TCACTGCAACCTCCACCTTCAG	Sequenced					263
GGGAAATAATTAATGTGAAGTC	Sequenced					124
TGGAGGAGAGTTTGTCAGTATAG	Sequenced					298
GGAATGGTGGTTGTATGGTTG	Sequenced					116
TCACTGCAACCTCCACCTTCCG	Sequenced					201
TTCTGATGGTTAAGTTCTGTCA	Sequenced					306
AGGGCAGGAGGTCCGTCCCTTC	Sequenced					27
TCACTGCAACCTCCACCACGTG	Sequenced					196
TCTAAGAGAAAGGAAGTTCAGA	Sequenced					272
GAAGTTTGAAGCCTGTTGTTCA	Sequenced					95
CTAGACTGAAGCTCCTTGAGGA	Sequenced					74
AATTGCTTGAACCCAGGAAGTGGA	Sequenced					8
CACTGCAACCTCCACCTCCTGG	Chip strong, Sequenced	31393	19.150194	22.611071		45
TCACTGCAACCTCCACCTCCCG	Chip strong, Sequenced	31810	20.186802	16.772465		199
TCACTGCAACCTCCACCTCCTG	Chip strong, Sequenced	45662	20.504339	18.911047		200
ATGGTAGCTGTCCACATCAGGA	Chip strong	8208	25.85717	21.352978		36
TCAGCTCCTACCCCGGCCCCAG	Chip strong	8279.5	11.228731	17.399603		204
GTTTCTCTGGGCTTGGCAT	Chip strong	8298	10.689093	5.6611276		257
TGGTCTGGCCCACATGGTC	Chip strong	8349	13.022524	4.8629713		231
GTGCTGGTGCTCGCTCCTCTGG	Chip strong	8165	11.725875	9.7062302		251
CTCAGGTGATCCACCCCTCTTG	Chip strong	8190	8.7424583	3.9819176		75
TGCAGGTTGCTGGTCTGATCTC	Chip strong	8079	24.743416	17.869699		283
AGTCATTATCTCCTGGACC	Chip strong	7790	10.371323	17.396904		30
GCTGCACCCCAGCCTGGGTAAC	Chip strong	7858	6.2366548	20.271864		162
CACTTCCCTTCTCTGCTCATGG	Chip strong	7886.5	8.1030474	7.7415953		347

TGCTGGCTATCCTGCGCCTTTC	Chip strong	7903	10.469044	13.746831	225
GGCTGCTGGTTTCTTGTTTTAG	Chip strong	7926	12.94939	11.212504	176
CTTCCTGCCTCTCGCCGCCCGC	Chip strong	7982	10.846725	2.7860351	89
CTGCTCTGGTTTCCTCTGTC	Chip strong	7506.5	7.7015729	15.622507	86
GCCTCCAGGTCGGTCTTTCTCT	Chip strong	7529	13.077046	6.7496343	104
CCCTCTTGGCTTCTATCCCACC	Chip strong	7596	7.1978688	6.3785648	363
CAGCTGGTGCTTGCCTGGCTAA	Chip strong	7373	13.676201	7.9258513	351
TCTCCCAGATCCTTTAGCCTCC	Chip strong	7384.5	14.663905	2.166656	274
TTTCTTGGGCCGTGTGCTGGT	Chip strong	7386	8.0159159	10.662634	248
ATCACTTTGAGTCCAGGAGTTT	Chip strong	7335	6.5335536	19.718058	32
GAGCCGCCCTCCACGATGTCCC	Chip strong	7252	8.6663809	14.735928	142
CCTCACTCAGGTTTGGACCCTG	Chip strong	7301	15.895414	5.3846102	61
GGGTTACTCTGTGTTGGTCAGG	Chip strong	7310	8.6937799	12.815997	129
TGCTCTGATTTTTGCCCCAGC	Chip strong	7060.5	10.413313	7.7476549	291
GCTGTTTTCCCATAGCTGGTCA	Chip strong	7061	19.803032	6.222959	164
GCTAGGCTGCTGGCCACTGAGG	Chip strong	6972.5	13.127683	19.686853	159
TGCTTGCTGTGGTTGGCTGGTA	Chip strong	6974	21.75724	11.332961	296
TCAGCCTCCTCCACCCCAGAGT	Chip strong	6996.5	14.03341	7.0927162	264
GGGGAACGCGCTGGCCCGCGCC	Chip strong	7005	6.2445078	11.806351	127
CTCTGTGATATGGTTTGTAATA	Chip strong	6862	19.265455	13.692534	84
CATTCTGTGAGCTGCTGGCTTT	Chip strong	6884	11.220102	9.6062307	52
CTCGACTTCCCTGGCTTGCGTGA	Chip strong	6890	6.5380254	11.584653	78
GGCGGCCCAGGCGCTTGGAGAT	Chip strong	6899.5	8.1672001	10.434432	172
TGCCGCCCGGCCATCTCGGCTC	Chip strong	6915.5	13.391404	5.9536037	220
TCTCTATGCCATGCTGGCCT	Chip strong	6926	17.665062	2.5852687	217
ACATTCTCTGATTGGTGCCTCC	Chip strong	6695	12.723179	6.4453721	319
CTGTGCTCTTTCCACGGCCCCA	Chip strong	6477.5	13.662484	9.3280506	139
AAGGCCGCCCCTTCATGCTCCT	Chip strong	6358.5	9.1175785	8.5895061	1
CAGCAGCTCAGCCTCCTTCCCA	Chip strong	6588	11.002058	9.0820408	349
CAGTTTGTCCCCATGGCCATGT	Chip strong	6591.5	13.401958	5.2375259	354
TGGAGCTGGGTCTGGGGCA	Chip strong	6426	15.46969	17.843594	297
CCTGGTCGGCGTGGTGACGGCG	Chip strong	6434.5	6.2044091	6.2762375	369
TCCTACGGTGGCCACAGTCTGG	Chip strong	6256	7.9984035	3.2358623	210
CGTTCACTCCCTTGCCCCTCGG	Chip strong	6280.5	7.0008011	9.7373304	73
TGTCTGGCTTTCTTCAGTTAGC	Chip strong	6191	9.9906111	15.989508	236
TGCTGCACCCTCTGCCTCCGGG	Chip strong	6094.5	6.9428978	10.588869	293
GCAGCATCCCGGCCTCCACTGT	Chip strong	5995	7.2606683	11.881517	147
TGTGGTAGTCACGGCCCGCCAC	Chip strong	5909.5	23.027369	15.816967	304
CTTGCCTGCCCTGTGTCATAAA	Chip strong	5903.5	13.361271	3.0393276	91
TTCACTGCTCTAGCCCTAATTT	Chip strong	5739	15.599205	7.8376389	240
TCCATTGGCCTTTTATCCTAGA	Chip strong	5760	15.329782	8.1126537	209
TGCCTAGCCAAGTCCAGTATTT	Chip strong	5823	17.976177	16.478537	221
TTCTGGCTTCTCCCAGGCGGCC	Chip strong	5582	8.2352791	10.879703	243
ATGGCCCTCTTATCACAGCTCC	Chip strong	5586.5	21.480997	6.3762493	342
ACTGCACTCCATCCAGCCTGGC	Chip strong	5668	7.6480083	10.938603	324
TGCCTGCCCCAGCTGAGATATC	Chip strong	5686	10.380668	15.221783	287
GCTCGCTGGGGTCTGCAGGCGG	Chip strong	5502	7.7859778	10.874097	111
GCAGCTCCTGGAGGTGAGAGGCG	Chip strong	5368	7.8018293	15.956004	100
CTCATTGTAGCCTCCAGTTCTTG	Chip strong	5375	10.634505	9.6296253	379
AGGCTGGTTAGATTTGTGGTCT	Chip strong	5392	20.112637	16.324888	26

GCTGCACTTCAGCCTGGGTGTC	Chip strong	5310	7.5533419	15.940791	113
GCCCTTTGTGTCTGGCTGGGGT	Chip strong	5320	11.978069	10.261797	152
TTCTCTGTGCTGGGTCCTGAGG	Chip strong	5272.5	8.1261625	9.2259359	242
AGATTTCCCTTCCTGCTTGCCT	Chip strong	5251	6.0291886	13.065763	17
TGCGTTCCAGTTGCTGCCAGGC	Chip strong	5079	11.194171	5.7294831	290
CTGGCTAAGATCCAAGAAAGGC	Chip strong	5036	14.178236	6.6532001	385
TCATTGCAACCTCCTCCTGGGT	Chip strong	5039.5	18.95397	9.7537737	207
TTGACATGCCTCCTACATGATC	Chip strong	5065	12.953059	10.809283	307
CCTGCTCTCTGTTCTTAAGCTT	Chip strong	5021	9.0648565	7.4354005	64
TGCACCACTGCACCCCAGTCTG	Chip strong	5009	7.3463378	16.848854	281
TGCTGCCCTAAGACCACCTT	Chip strong	4950	11.124713	13.249466	294
GGGAGTTGTGGTTGGCTTCTGG	Chip strong	4978	8.3206406	9.2158394	179
GGCCGTGGTCGCTGACTCTCGT	Chip strong	4980	6.9448657	12.094063	120
TAGGTATGGCTTGTGGCACAGC	Chip strong	4840	23.281979	15.36544	261
GCGCCGCCATCCGCATCCTCGT	Chip strong	4801	16.34218	9.281786	107
CTGGTGTTGGGTCTTGCTTTTA	Chip strong	4756	6.5764294	8.8639517	138
ATGGGCCTCCTATTATCCCCAT	Chip strong	4745.5	13.363207	5.1394033	34
CGCCCAGGCTGGAGTGCCAGTG	Chip strong	4722	9.6376123	13.758563	69
CGACCTTGTGATCCTCCCGCCT	Chip strong	4594	7.4134154	4.4487605	370
CTCAGTGCAACCTCCGCCTACT	Chip strong	4516	8.8905106	13.512998	76
GGCTCTGGCTTTGGAGGAGCAG	Chip strong	4483.5	6.8781896	14.473881	174
GGGCTTTTGGAATGGTCTGT	Chip strong	4463	9.6709318	2.0551727	126
AGTCGCTGGACCATCAGAGCCT	Chip strong	4419	12.240126	13.100382	335
GGTGGTGGAGCGGGCCCAGGCC	Chip strong	4320.5	7.4591732	12.328825	185
TCCAGCTGTCCACGTCTTCCTG	Chip strong	4070	6.5770264	7.9605851	265
ATGGTACTCCAGCCTGGGTGAC	Chip strong	4173	7.3957338	16.409479	35
ATTCTGTGCTAACTGCAGGCCA	Chip strong	4140	19.305922	11.530575	343
GACCTCGTGATCCGCCTGCTTT	Chip strong	4080.5	7.6009617	13.947659	97
TGGTGCAGCGTGTGGTGGCTCT	Chip strong	4082.5	9.6208868	12.887189	302
TGGTCGGGCTGCATCTTCCGGC	Chip strong	4093	8.0100813	2.1106353	230
CACTGCAGCCTCCATCTCTGGG	Chip strong	4050	6.9180322	10.574921	47
ATGGTGCTGGTGGGAGTGTATT	Chip strong	4053	18.971554	14.625937	37
TGCCTGCCGTTAAATGTTACTT	Chip strong	3936	12.749383	11.509386	222
GACCTTGTGATCCGCCCACTTT	Chip strong	3834	7.5950313	9.0545225	141
CAACTCACTGCGGCCTCAACCT	Chip strong	3783	9.680912	5.8278494	41
CTGGAGGAGCTGCCATG	Chip strong	3669	12.842446	14.933422	384
TAGCTCCTCCCAGATCTCATCT	Chip strong	3659	10.385338	3.9473054	192
TTGGGGGAGGCCTGCTGCCCAT	Chip strong	3549	9.3567915	8.3044834	310
GTTGGTCTTCATTAAATGCTTT	Chip strong	3499.5	17.153486	5.8892236	255
GGTGGCTATGGCTGTGCTCGC	Chip strong	3426.5	15.917648	2.9563422	132
GATGTCGTGATCCACCCGCCTT	Chip strong	3425	7.313684	10.200798	145
AGTGGCGTGATCTCGGCTCGGT	Chip strong	3395	8.8775339	14.742507	336
GTGCTTAAAGAATGGCTGTCCG	Chip strong	3362	26.398634	13.195816	252
TCACTGCAAGCTCCACCCTCCG	Chip strong	3370	12.960393	9.7885542	202
CGGCACTGTAGTCTGGCTGGGA	Chip strong	3297	6.7212648	9.1534166	374
CTGGCTAGATGTGTGGCCATGA	Chip strong	3221	21.032122	14.058989	137
AACCTTGTGATCCACCCACCTT	Chip strong	3034	7.7903786	12.639959	313
AGCTGGCTTACTTGAGATGCAT	Chip strong	3049	8.8567095	7.4132333	329
GGGGCTTCTAGGGTGCCAGATC	Chip strong	3012.5	13.356146	7.901947	181
GGCCCAGGTTGGAGTGCAGTGA	Chip strong	2994	8.0930119	10.374014	168

GGCCCAGTGCAAGCTCTTTCTG	Chip strong	2960	7.6298795	6.4523926	118
GCCCTTGAAGCTCTGACCCGCT	Chip strong	2947	7.6962008	2.815666	151
GCTGGCTCCACCTGCTGCCAGG	Chip strong	2916	6.3332305	13.052609	115
CCACTGAGGTAGCTGGTGACTG	Chip strong	2861	16.719574	7.8953633	54
CCTCCGGTCATTGTGCGGGCCT	Chip strong	2835	12.644177	5.132216	366
AGGATCTTGCTATGTTGGCCAG	Chip strong	2784	10.949057	7.9714575	330
TGGTGCTAGTTAAATCTTCAGG	Chip strong	2715	17.999035	10.341267	232
GCACTGCTGCCTCCTGG	Chip strong	2627	6.3458524	7.414557	99
TTATAATGTATAGCTGTGCCTG	Chip strong	2566.5	15.056374	8.2182913	238
TGCTTCTAGGGAGGCCGCAGGA	Chip strong	2554	12.58359	11.930317	295
TAGAACTATGGCTATGTGCCA	Chip strong	2523.5	18.843672	7.4688845	259
GACCCATCCTCCACTTGGCAGC	Chip strong	2498	6.505065	6.8388047	96
GCCTAGTGGATTTGAAGGGCC	Chip strong	2352	20.613605	8.8114462	153
TGCCCACTGCTGGCCACCACCC	Chip strong	32112	15.630626	16.785101	219
GGCTGGCCCCATCCAGGCTGGCA	Chip strong	65518	10.117671	10.864906	121
ACAAAGCGCTTCTCTTTAGAGT	Chip strong	65518	11.238881	26.766436	9
GGGGCTGGTCTTTCCACTTACT	Chip strong	65518	11.24554	19.391401	180
GGAGGCTGGCCTTCAGACGGGT	Chip strong	65518	12.034198	25.266558	166
ACGCGCTGGGGCGCTGGCCAAT	Chip strong	65518	13.337035	9.5484018	12
ACAAAGTGCCTCCTTTTAGAGT	Chip strong	65518	13.412503	32.421429	10
CGCCTGGCCCCCAGTACTTTGT	Chip strong	65518	14.386203	22.674049	373
GCCTGGCCTAAATTAGTAATTT	Chip strong	65518	14.47023	33.939186	155
CCCTCTGGCCCCTGTGGTGGAT	Chip strong	65518	14.648276	19.804953	362
CTGCCTGCCTGGCCCAGGAACC	Chip strong	65518	14.752467	36.164337	381
CGCCCGCTGGCCCTGCGATCTC	Chip strong	65518	15.196337	33.776985	70
AGGACCTGTCCCCTGGCCCACT	Chip strong	65518	15.796532	15.770715	24
CAGCAGCACACTGTGGTTTGTA	Chip strong	65518	16.623587	30.172779	348
CCGCCTGGCCCATTGCAGGGCA	Chip strong	65518	19.692606	29.045151	365
CACTGCACTCCAGCTCTGGGT	Chip strong	65518	20.15584	31.571056	345
ACAAAGTGCCTCCCTTTAGAGT	Chip strong	65518	22.461653	34.028076	316
CCCCACTGTCCCCGGAGCTGGC	Chip strong	65518	22.799175	24.102064	358
GGCGCTGGCCTGTGGGATCCCG	Chip strong	65518	24.841112	31.449797	171
GCGGCGGCGGTAGCAAAAATGA	Chip strong	65518	27.5298	22.089998	109
AGGGTTGTGTGCTGGCCGCTGG	Chip strong	65518	29.01285	32.102142	28
GGTGGCCCCTGGGAGATGCTGG	Chip strong	65518	31.295538	14.111359	131
CACTGCACTCCAGCCTGGGCAA	Chip strong	65518	36.446095	33.140068	12852
TGTGCTGGCCTTTGGTGACTTC	Chip strong	65518	44.612064	26.016636	237
CATGCTGGCCCACACCCGCTGC	Chip strong	57891	37.069935	17.358248	50
GGCTTCCTGCCTCGGGCTGGCC	Chip strong	58372	13.006404	4.4936109	177
GCCTGGCCTAATTCCAGCATTT	Chip strong	62842.5	16.076189	31.293688	156
GAAGGGGGAAGAGAGCTGGCCG	Chip strong	63993	20.677708	18.040138	94
CCCGGCACCTCCGCTGCACAC	Chip strong	50589.5	17.716768	10.848449	360
ATGCCACTGCGCTCCAGCCTGA	Chip strong	50941.5	15.106459	30.447573	341
CCCCACTGTTTTCTTCATCCTA	Chip strong	50957	32.576454	4.8442335	359
CTTGGAGTAGGTCATTGGGTGG	Chip strong	51071	16.39068	33.942337	92
AGGTGCTGGGGCTTGGCCTGCT	Chip strong	54992	14.781937	19.839622	333
TGCCCGGATACCCCTGGCCTC	Chip strong	46111	13.316625	10.030684	285
ATTGCACTCCAGCCTGAGCAAA	Chip strong	46579	22.505102	33.557095	39
TCTCTTCGCTGGCCCTCGGGGA	Chip strong	47791.5	15.379544	20.008915	276
CCGTCCCCGGTGCTGCCTGCGC	Chip strong	48514	9.4747534	7.9190497	60

TGCTAGCTGCCCGAAGGTCTCA	Chip strong	39989	47.058292	15.67876	223
CCTGGCCGCTGTGCCCCCT	Chip strong	40002	11.873036	10.703612	65
ACACTTTGCCCCTGGCCGCCTT	Chip strong	42189	12.009233	22.436626	317
TGACCTCCTTTCTCGACTAATT	Chip strong	43651	10.281033	24.914602	278
CTGCTGCGCTGGCCGTCACGGT	Chip strong	45168	18.758972	18.507338	382
TTATTGCACTCCAGCCTGGGTA	Chip strong	45303	21.338472	22.149384	239
CTCAGTGCTGCTGGCTCCTGTC	Chip strong	30057	40.88406	25.543219	378
GACCCCTAAACCCGCTGGGCTG	Chip strong	30088.5	13.552105	6.4749699	140
CCTGGCTCTGGCTTCCTGTTGT	Chip strong	34525	11.373339	6.4300051	368
ACCCTGGCCGACTGCCCCTT	Chip strong	35652	12.982363	11.41268	11
GCCTGGCCTCCTACAGTACTTT	Chip strong	35866	15.014146	23.263319	157
GCCCTTCGGAAAGCGTCGCCTG	Chip strong	37481	13.375318	6.6135831	150
TGCCTGGCCTCCTGATTCCCTC	Chip strong	37634.5	13.004288	2.9085336	288
CCAGACCATTTTGCCTTACC	Chip strong	38076	30.955603	11.095823	55
CGTAAGTCACAGCGCCTGGCCC	Chip strong	38826	11.506068	25.787857	72
CAGGCTCTTCCCTCTGGCCAAG	Chip strong	25089	10.865691	11.601097	352
GATGAGTTTGCCTGGCCTGCAG	Chip strong	25445.5	12.297516	17.035336	143
GCTGTAAGTCACCTGGCCCGAT	Chip strong	26191	8.8471966	25.053482	163
AGAAGGGCTGGCAGGAGTT	Chip strong	26652	14.563484	25.132761	16
TGCCTGGCCTCTTCAGCACTTC	Chip strong	27021	10.873885	26.68429	289
GGTGCCCCATCGCGGGTGGCTG	Chip strong	27077	14.316696	22.61035	130
GCTCCTGGCCGGGCTGCTCCTG	Chip strong	27106	14.495318	9.280777	161
AAGTGCTCATAGTGCAGGTAGT	Chip strong	27166.5	9.1624584	28.31859	4
CAGGAAAAGGCGGCTCGGGGCT	Chip strong	27684.5	9.7338009	6.1309323	49
TCACGCGCCCTCCTGGGCCCTG	Chip strong	28630	10.411592	10.865385	195
GGCGTGCCCTGGCCCCGAGGCT	Chip strong	28813	10.987214	21.873014	173
TCCTGGGGCTTGTCGCTGGCCA	Chip strong	28926	12.960393	7.4913173	216
GCTTCAGAGAGGGGTGAAGCTG	Chip strong	21900	17.158428	13.963737	165
CTCTCCTTGGCCACCTCCATGA	Chip strong	23276	12.960393	7.0737572	81
GGCTGGTGGCTGGTTCTGGACC	Chip strong	20736.5	31.680035	17.914019	122
CACCCGCTGGTCCCTGCAGTTC	Chip strong	20816	8.5344362	27.261486	42
CCCTGGCTCACTTTCTGTTGTG	Chip strong	20839	26.185976	5.4283981	364
GGTAGTCTTTGTCCCCTGGC	Chip strong	20872	12.44091	3.1238594	182
CATCACCCCCAGACCTCAGTGC	Chip strong	20958.5	35.708847	4.6072259	355
GGCTGGTTAGATTTGTGGTCTT	Chip strong	21258	33.569485	15.757149	123
TTGGTCCCCTTCAACCAGCTAC	Chip strong	20228	9.5504265	23.87529	246
TCAGGGGTTGGCTTGTTGTGTT	Chip strong	20519.5	8.8405285	21.048086	206
TACTGCACTCCAGCCTTGCCAA	Chip strong	18364	10.029301	16.731598	258
AATTGCACGGTATCCATCTGTA	Chip strong	18407	8.3120737	26.950815	7
TGGTTCTTCGCTGGGCGGCTGC	Chip strong	18451	17.683105	11.562138	234
CCCTGCCTGTCCTGGTCCCGTT	Chip strong	18466	9.747386	21.814604	59
TCTCCACAGCTGGCCCCCAAGA	Chip strong	19483.5	23.591568	26.742323	273
CCTCGCTCTCCATTCGGCCCTC	Chip strong	9378.5	6.9943829	8.7534571	367
GGCCGGGTGCTCTGGAGGTGCT	Chip strong	14393	11.734104	12.172738	119
AGCTCCTGGCTTCAAGCAATCC	Chip strong	14107	10.339123	18.669428	20
TTTAAATCACAACTCTGCCCCT	Chip strong	15129	15.825633	8.2785378	247
GTAGCTGTGTTCATTCTGGATG	Chip strong	15186.5	37.683685	11.412519	187
AAGTGCTAGTGAGTCTATTGTA	Chip strong	15263	30.581371	17.914198	3
GCCCCAGCTCACCGGCTCACTG	Chip strong	15345	20.667051	7.4258513	103
GTGCGGCCTGGCCTTCAAGTGG	Chip strong	15350	9.6908836	19.487803	250

GTTGGTTTTAGCTTGGCCCATT	Chip strong	15833	22.509586	7.6416044	256
TTGATGCCCCGTCCTGTACACT	Chip strong	16077	20.144415	22.335653	308
GCAGGGAACTGGCTGGGCTTT	Chip strong	16084	7.1124773	22.951672	102
ACCATCTCCTGTGCCTCCAGCT	Chip strong	16520	12.522655	19.197701	320
AAGTGATACGCCTGCCTCGGCC	Chip strong	16691	9.2873106	2.0918362	2
GCCTGGCCAACATAGTGGGACC	Chip strong	16749	8.6138811	20.486101	154
TCCTGGCCATCCAGCCTGGGGA	Chip strong	16778	7.2028656	18.973217	214
TCCTCCAGAGCTTCATCCTGCC	Chip strong	16927	20.0035	5.2284846	212
GCGCCTGTGCCTCCTAA	Chip strong	17094	12.760594	23.842529	108
CTTGATTTTGTCTCTGGCCCTG	Chip strong	17456.5	9.4672995	8.272316	90
CCTGTGGTCCCTGTCTGTGCCT	Chip strong	17748	13.149311	10.342139	66
ACTTGGAACTGGCCCCTTTCAT	Chip strong	17782	14.512917	23.881441	15
TTCCCTGGGACTGGCCTGCACC	Chip strong	17948.5	9.3010607	15.061718	241
GATTACTGGTATTTGCTGGCTCC	Chip strong	13394	25.892035	5.407784	146
AGGTGGCCACAAGGTGGCTGGC	Chip strong	13621	20.378857	17.680929	334
GGCTGCTGGTCTTTCATAGTGGG	Chip strong	12604.5	21.291653	18.561375	175
CCCCTGCTGTGCTTGCATGGCT	Chip strong	12605	18.076384	11.74684	57
TGGCTTTAGTAATAAGTTTCTC	Chip strong	12660	16.773508	11.141039	226
TCTCTAGTCCTGCCTCCCC	Chip strong	12753	19.169752	7.0407801	275
TTGTCACTGCACTCCAGTCTGG	Chip strong	12372.5	9.9857264	24.029345	311
GGGAAGCTGGTCACCCACAGGC	Chip strong	12450	11.913556	20.388573	178
CTCCTTGCTGGTCTGGTGTAAT	Chip strong	12887	13.768332	6.9087734	77
TGGGTCTCTGGCCACCCCAGCC	Chip strong	12948.5	8.0436459	19.699574	228
CGGCGAGCGGGACCTGCGCCTG	Chip strong	13179	8.3394403	5.5586901	375
GCTCACAGCCTCCCCCGGCCTG	Chip strong	13198	7.8765292	3.4258959	160
TTTGGTCCCCTTCAACCAGCTA	Chip strong	13310	7.6353297	18.880299	249
TTGCTAGTGTTTGGTTGATGGT	Chip strong	13321	29.278065	21.353354	309
TGGGTCCTGGCTGAAGATCTCT	Chip strong	13345	7.4858232	22.909485	227
AGCAGAGCAGTCTCCGCTCA	Chip strong	11919	6.4712315	22.303505	327
TCTGCCTCCAGGAGCTGGCA	Chip strong	12022.5	6.4897313	19.629604	218
CTCTGATGTCTGCCCCTCACCT	Chip strong	12084	23.231821	2.7038672	83
TGGTGGAGGCGCTGCTGGCCAG	Chip strong	11424	10.211181	12.62489	233
CGCCTCCTCTCTGTCCTGATTT	Chip strong	11564	15.306285	4.1242805	372
AGGTGCTCTGTGTATGCATAGA	Chip strong	11593	19.340197	19.182079	29
GGCCGTCCCTAGAGATGGGGTT	Chip strong	11689.5	8.4446125	7.2657032	170
CATTATTCTCAGTTCTGTGCAG	Chip strong	11732.5	27.869678	16.957344	51
TGGTTTCCCTTTTGGCCTCTCC	Chip strong	10935	11.08107	6.0971227	303
CTGGCCCCTTTCATTCTGGAAG	Chip strong	11008.5	19.356289	14.29258	87
ATAGCAGCGCTGGCCCTCTGCC	Chip strong	11135.5	8.3489428	16.26886	339
TGCAGCCTCTTGTTTCAGCCCC	Chip strong	11243	17.256807	2.5227482	282
GGGTCTCTGTTGGCTTCTT	Chip strong	11264.5	7.8554482	5.5741806	128
AGCCTCTGGTCCTTTTTTCCCT	Chip strong	11308.5	17.074085	5.3993454	328
AGCTGGTTTAATATGCTGTCTG	Chip strong	11390	14.25641	8.7015753	21
CACTGCCTTGGCCACCTATCCT	Chip strong	10671	9.1234684	14.108407	346
GCCTTGGTGGTTTTGGTAGT	Chip strong	10696	15.110422	8.3110876	106
GTGGTAGCTCCAGGCTGTCTGA	Chip strong	10711	30.533655	22.150589	253
TGCTCTGATTTTTGCCCCAGCT	Chip strong	10768.5	14.230415	7.0602937	292
TCCTGGGCTTTGGCTTGTTGGG	Chip strong	10813.5	7.7058806	7.1675959	215
TCCACTGTCCCTGGCACTTTT	Chip strong	9134	6.4327211	12.8872	208
CGCCATGTCCAGCGTCTTCGGG	Chip strong	8765	20.334946	20.485155	68

CATTGCACTCCAGCCTCCCATA	Chip strong	10435	16.077471	9.6274853	53
AGAGTCTCCCTGTGTTGCCCTG	Chip strong	10467	7.4270558	12.602409	325
TCCTTCCTCTGTCAGGCAGGCC	Chip strong	10471	20.063852	2.295146	270
ACTGCACTGCAGCCTGGCCAAC	Chip strong	10584	7.3915148	12.856659	14
TTCTTCTGCCCCTTGCCTGACA	Chip strong	10593.5	16.647232	9.2061243	244
CCAGTACGTTGCTCAGCTCCTC	Chip strong	10610.5	11.484417	2.7025924	357
CGCCGCCCTCCGAGGACTCCTT	Chip strong	10614	8.6334085	6.5864415	371
TTGCTCAGGCTGGCGTGCAATG	Chip strong	9724	11.115126	19.742767	245
CCCGCGATCTCCTTGTGGCCGT	Chip strong	9728	11.945862	6.9863696	58
CACCTGGCTGGCAATTTATAAT	Chip strong	9852	8.0965796	17.484594	43
TCAGGGCTGCACTGGCTGGTCT	Chip strong	9852	10.620815	11.96568	205
TGGAGTTGGCTGCAGATGAGTC	Chip strong	9954	13.087917	15.585505	299
TGCCTAGGTCTGGCCTCCTTGG	Chip strong	10161	16.315468	2.7759731	286
GCCAGCCTCCATCCTCCCTTG	Chip strong	10191	21.391727	11.342846	149
TCCCCTCTTGGCTTGGTCCAGA	Chip strong	10285	8.0190945	16.142628	269
GGTGCCCTCTGGCTCTACTCCC	Chip strong	10302.5	7.4917507	16.076124	184
AGGGAAGGACTGCTGGGTTGGC	Chip strong	10310	6.749754	2.3204882	332
GCTGAACGAGCTGGCCAAGTTC	Chip strong	9451	6.6551905	19.321331	112
CAGCCTCTATGCCCCCGTCACC	Chip strong	9484	16.652414	11.957335	350
ACCCCGCTCCTTGCAGCCTCTG	Chip strong	9609	6.7912097	4.80404	321
CTCTTTGGTTGGTTCCTGATGC	Chip strong	9661	15.128378	18.743273	85
AATGGTCTCTTTGTTCCCTGCT	Chip strong	9183	7.6419687	3.2526188	315
AGTGTTGGCTCGGCTGGCTGCC	Chip strong	9220.5	15.521686	7.1320724	337
ATTTACATACCCAGCAGCCTCC	Chip strong	9344	14.651403	5.7202735	344
ACCTTGTGATCCACCTGCTTTG	Chip strong	9350	10.149202	4.1434402	322
TGCCAGTATCCTTCTGAGACCC	Chip strong	9374.5	18.697142	19.309006	284
ATCTCAGCTCTGCCTCCTGGGT	Chip strong	8963	12.361974	12.799247	33
TCCTCCCTCACCTCAGTCTGGG	Chip strong	8976.5	11.361602	9.0995693	213
TAGCTGAGCCGCCTGGCTGGGG	Chip strong	9026	6.8317003	8.4015751	193
CCTCTTTCACCGTGCCTGTCCC	Chip strong	8800	16.616077	5.438931	63
TCCAGGCCCTCAATCCATTTCCA	Chip strong	8934.5	13.815792	9.5553522	266
CAGGCTGGCTCCCTGAAGGTTC	Chip strong	8459.5	6.1472831	17.683357	353
TGCTCTGTTGGCTTCTTTTGTC	Chip strong	8407	17.417171	17.734081	224
CACTGTCTTCCTTTGGCTCCTC	Chip strong	8497	10.860129	11.864268	48
AGCACGGTGGGTTTGGCTGGCA	Chip strong	8532	8.91047	7.0811062	18
GTCCTCACTGGCCGCACGCTGA	Chip strong	8536	7.1346483	19.281561	188
CCAGGCTGGAGTGCAAGCAGCA	Chip strong	8552.5	11.002619	19.600433	356
CGGTGCCTCCTCCAGTGTTGCT	Chip strong	8559	10.886886	9.833169	71
GTCAGTCATTGAATGCTGGCCT	Chip strong	8592.5	23.067156	11.230301	133
CCTTTTATCCCCTAATTGGCCT	Chip strong	8596	19.616385	9.8835402	67
TGGTAGGTTGGGCAGTTC	Chip strong	8731.5	31.377066	20.530041	301
GTGTTCCTGTGCTGGATGGTCA	Chip strong	2131	11.864914	6.3784571	191
CCTCTGCACCAACCTGTCAAGA	Chip strong	2057.5	11.429537	3.11975	62
GGAGGTACTGTAGCTGGCGTT	Chip strong	1877	10.634505	9.6884193	167
GTGCTTTGCTGGAATCGAGGAA	Chip strong	1710	10.403996	8.5636625	190
AGCGTGTTGGGAGGAGCTGCAG	Chip strong	1410	9.0065594	8.8227701	19
TAGCATGGCTCTATGGAACA	Chip strong	1393	10.196934	8.9662762	260
GGCCAAGTGGATGCTGGTTTAGC	Chip strong	1351	6.3048329	7.5876508	117
AGGACCTGTAATCCCAGCACTT	Chip	1119.5	4.0140038	5.6218853	23
GTCTCGGACTCCTGATCTCAGG	Chip	1380	4.1414785	3.9894354	189

TCGCTCAGGCAGGAGTGCAGTG	Chip	1902	5.7879028	8.7315207	271
TGATCTCGTGATCTACCCGCCT	Chip	1982	5.9927278	6.810081	280
CACCTTGTGATCCACCCGCCTT	Chip	2139	5.5668392	4.7121377	44
AGTTCTCTTGCTTCAGCCTCCC	Chip	8418	11.501246	1.3339518	31
GCAGGGAACTGGCTGGGCTTTC	Chip	9142.5	5.9037857	16.801399	148
GCTCCCACTGCTGTCCTGCCAT	Chip	9433	17.716768	1.6475885	110
CCCCTCAGTTTGCTAGTATTTT	Chip	11735	24.905746	1.1986766	56
CTCGCCCCTCTCAGCCCTGCAA	Chip	14248.5	19.352268	1.4588933	79
GCCTGTCCTCTTCCGCCTGTCT	Chip	14508	12.145576	1.6282115	105
GGTTCTCAGCCTGAGCCGCCCC	Chip	18192	21.105703	1.4826102	186
CTGGCCTATCATAAGCATTTT	Chip	65516	15.111923	1.4583727	88
ACAGGCGATCCACCCGCCTCAG	Chip	2228	5.9650521	8.9491081	318
GAACTTGTGATCCGCCCACCTT	Chip	2483	4.4610376	7.0900927	93
GACCTTGTGATCCACCTGTTTT	Chip	2612	4.8775668	12.335071	98
CTCTGAGTCCTGCACTCACCCG	Chip	2770	6.7869315	1.284364	82
CTGCAGCCTCCACTTTCTGGGC	Chip	2839	4.7054248	13.918253	380
GTGTTGTCGCTGGGTTTTGAGGG	Chip	3030	4.5279474	3.9595523	254
TAGGAGGATTGCTTGTGGCCAG	Chip	3154.5	4.6519237	4.9273152	194
CGGTGGGTGCTTCAGGCGGTGG	Chip	3999	5.0099111	5.715847	376
GTGACTGTGGGTTTCTGGTTCC	Chip	4025.5	5.8571658	7.4026732	136
GCTGCTGGGCCATTTGTTGG	Chip	4101	7.7621112	1.3319389	114
GCAGGCTCTGGCTTATTCTGGG	Chip	4399	4.4706116	13.904231	101
GCGGGCGGCTTCATCTTGCCCT	Chip	5038	5.1213508	7.6892729	158
TCCCAGCTCCTGGGCCCCACAG	Chip	5372.5	4.9255114	7.1915674	267
ATCTTTTATCACTCCCACTGCT	Chip	5396	5.4679914	11.567021	340
GATGGGTTTGTTGGAGAGGTC	Chip	5425.5	4.8749881	17.533426	144
GTGACCTGGCCGCCTAAACCCA	Chip	5941.5	5.6531525	18.527802	135
AAGACACCAGAGACTGGCCTCA	Chip	6306	5.8909965	5.1631103	314
TCCTCAGCTTGGCCACGGAGTT	Chip	6478.5	5.8972673	17.989834	211
TGTCTCCCACTGGTCTTCCAG	Chip	7039	5.6089306	15.167439	235
AAACTGCTTCCTTGGCCT	Chip	7436	5.6282043	5.6413546	312

```
ROW# INFECTION NAME     SEQ ID NOs OF GAMS ASSOCIATED WITH INFECTION
==== ===================
===============================================================================
2    Bordetella pertussis 1, 6, 10, 11, 12, 13, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33,
              34, 37, 41, 42, 43, 44, 47, 48, 49, 50, 52, 53, 54, 55, 57, 58, 59, 60, 63, 65,
              66, 67, 68, 69, 70, 71, 75, 76, 77, 79, 84, 86, 87, 88, 89, 91, 94, 96, 97, 99,
              100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115,
              117, 119, 120, 121, 122, 123, 125, 126, 127, 130, 131, 132, 133, 137, 138, 139,
              140, 141, 142, 145, 147, 149, 150, 151, 154, 155, 156, 157, 158, 160, 161, 162,
              164, 165, 166, 167, 168, 170, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181,
              183, 184, 185, 188, 191, 195, 196, 197, 204, 205, 211, 212, 214, 215, 216, 219,
              220, 222, 225, 228, 230, 231, 233, 237, 239, 241, 242, 243, 244, 250, 251, 253,
              262, 264, 265, 266, 268, 271, 272, 274, 276, 277, 280, 281, 282, 284, 285, 287,
              288, 289, 290, 293, 294, 296, 297, 299, 300, 301, 302, 304, 306, 308, 310, 312,
              317, 318, 321, 322, 324, 326, 327, 329, 330, 332, 333, 334, 335, 336, 339, 340,
              342, 343, 345, 348, 349, 350, 351, 352, 353, 355, 356, 357, 358, 360, 361, 362,
              364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 378, 380, 381,
              382, 383, 384, 385 and 49788-55666.
3    Brucella suis 1330   1, 6, 10, 11, 12, 13, 14, 16, 18, 19, 21, 23, 27, 32, 35, 37, 39, 40, 42, 47,
              48, 49, 50, 52, 53, 58, 62, 63, 65, 68, 70, 71, 77, 79, 80, 85, 86, 89, 90, 98,
              102, 105, 107, 108, 109, 111, 112, 114, 115, 119, 120, 121, 122, 123, 124, 125,
              126, 132, 138, 141, 142, 143, 150, 151, 152, 154, 155, 156, 157, 158, 160, 161,
              162, 164, 166, 168, 171, 172, 173, 175, 176, 177, 180, 181, 183, 185, 186, 190,
              195, 198, 199, 200, 201, 205, 207, 211, 212, 214, 215, 217, 218, 219, 220, 221,
              222, 225, 229, 230, 231, 233, 236, 237, 240, 241, 243, 244, 250, 251, 256, 258,
              263, 264, 265, 266, 270, 277, 279, 280, 281, 282, 285, 287, 289, 290, 293, 294,
              295, 297, 300, 302, 303, 306, 308, 310, 312, 315, 318, 319, 320, 321, 330, 331,
              333, 334, 335, 342, 343, 347, 348, 349, 353, 354, 356, 357, 360, 361, 364, 365,
              366, 368, 369, 370, 371, 373, 374, 375, 377, 381, 382, 384 and 55667-60259.
4    Chlamydia trachomati 2, 3, 4, 6, 7, 8, 9, 10, 13, 14, 16, 18, 19, 20, 21, 22, 25, 26, 27, 30, 31, 32,
     s                33, 36, 37, 38, 40, 45, 46, 47, 48, 49, 51, 52, 55, 62, 63, 64, 67, 73, 74, 75,
              78, 81, 82, 84, 85, 86, 87, 88, 91, 94, 95, 98, 99, 104, 105, 106, 111, 113,
              116, 122, 124, 126, 128, 132, 133, 136, 138, 146, 148, 149, 152, 154, 155, 156,
              157, 160, 164, 166, 167, 177, 179, 180, 181, 187, 188, 190, 192, 194, 198, 199,
              200, 205, 207, 208, 209, 210, 211, 213, 214, 217, 218, 222, 224, 225, 226, 229,
              232, 233, 235, 236, 239, 241, 242, 243, 244, 245, 248, 251, 252, 253, 254, 256,
              257, 259, 262, 264, 265, 269, 270, 271, 272, 273, 274, 278, 279, 287, 288, 289,
              293, 295, 296, 297, 298, 299, 302, 303, 305, 306, 309, 311, 312, 316, 318, 319,
              320, 322, 323, 324, 325, 326, 327, 328, 330, 332, 333, 335, 338, 340, 341, 343,
              344, 345, 348, 349, 350, 353, 354, 356, 363, 373, 384 and 60260-67437.
5    Chlamydophila pneumo 25, 27, 33, 46, 55, 62, 73, 105, 152, 160, 166, 177, 179, 180, 190, 205, 208,
     niae AR39           213, 214, 218, 236, 242, 244, 262, 271, 274, 298, 323, 325, 327, 345, 353, 356
              and 67438-68147.
6    Chlamydophila pneumo 3, 5, 6, 8, 9, 10, 13, 17, 20, 21, 22, 23, 25, 27, 28, 31, 32, 33, 37, 39, 45,
     niae CWL029        46, 47, 48, 50, 52, 55, 62, 63, 64, 66, 67, 69, 73, 74, 82, 84, 85, 88, 89, 90,
              91, 92, 95, 101, 102, 104, 105, 111, 114, 124, 125, 126, 128, 143, 146, 148,
              152, 159, 160, 161, 164, 165, 166, 168, 175, 176, 177, 178, 179, 180, 181, 187,
              189, 190, 192, 194, 201, 203, 205, 207, 208, 209, 212, 213, 214, 217, 218, 221,
              223, 224, 227, 232, 233, 234, 236, 238, 239, 241, 242, 243, 244, 245, 247, 248,
              252, 257, 258, 259, 260, 262, 263, 271, 272, 274, 275, 279, 281, 282, 283, 286,
```

289, 295, 297, 298, 299, 302, 305, 306, 309, 311, 312, 314, 319, 323, 324, 325, 326, 327, 330, 333, 338, 340, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 356, 363, 377, 382, 383, 384 and 68148-75439.

7   Chlamydophila pneumo 3, 5, 6, 8, 9, 10, 17, 20, 21, 22, 23, 25, 27, 31, 32, 33, 37, 39, 45, 46, 47,
niae J138   50, 52, 55, 62, 63, 64, 66, 67, 69, 73, 74, 82, 84, 85, 88, 89, 90, 92, 95, 101, 102, 104, 105, 111, 114, 125, 126, 128, 143, 146, 148, 152, 159, 160, 161, 164, 165, 166, 168, 175, 176, 177, 178, 179, 180, 181, 187, 189, 190, 192, 194, 201, 203, 205, 207, 208, 209, 212, 213, 214, 217, 218, 221, 223, 224, 227, 232, 233, 234, 236, 238, 239, 241, 242, 243, 244, 245, 247, 248, 252, 257, 259, 260, 262, 263, 271, 272, 274, 275, 279, 281, 282, 283, 286, 289, 295, 297, 298, 299, 302, 305, 306, 309, 311, 312, 314, 319, 323, 325, 326, 327, 330, 333, 338, 340, 343, 344, 345, 346, 348, 349, 350, 352, 353, 354, 356, 363, 377, 382, 383, 384 and 75440-82241.

8   Chlamydophila pneumo 20, 21, 22, 25, 27, 31, 33, 45, 46, 50, 55, 62, 64, 73, 82, 89, 92, 104, 105,
niae TW-183   126, 143, 146, 152, 160, 161, 166, 175, 177, 178, 179, 180, 187, 190, 201, 205, 208, 209, 212, 213, 214, 217, 218, 221, 232, 236, 239, 242, 244, 248, 257, 262, 263, 271, 272, 274, 275, 279, 282, 289, 298, 299, 302, 306, 312, 323, 325, 327, 338, 340, 345, 346, 350, 352, 353, 356, 363, 382 and 82242-85213.

9   Coxiella burnetii RS 1, 3, 5, 6, 7, 8, 10, 13, 22, 25, 27, 33, 36, 38, 40, 42, 45, 46, 48, 51, 52,
A 493   55, 62, 67, 73, 78, 80, 81, 84, 91, 105, 111, 116, 124, 126, 132, 141, 142, 146, 147, 152, 158, 160, 164, 166, 177, 179, 180, 186, 187, 190, 205, 208, 213, 214, 218, 227, 229, 232, 234, 236, 239, 241, 242, 244, 247, 248, 249, 252, 256, 259, 262, 268, 271, 272, 274, 279, 280, 281, 282, 285, 298, 299, 300, 303, 305, 306, 307, 312, 315, 316, 320, 323, 324, 325, 326, 327, 333, 340, 344, 345, 353, 354, 356, 365, 373, 374, 376, 379, 385 and 85214-90622.

10 Escherichia coli CFT 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 21, 22, 23, 25, 26,
073   27, 28, 30, 31, 33, 34, 35, 36, 37, 39, 40, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 99, 100, 101, 102, 103, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 119, 120, 121, 122, 123, 124, 125, 126, 129, 131, 132, 133, 135, 136, 137, 138, 140, 141, 142, 143, 145, 146, 147, 148, 152, 154, 155, 156, 157, 158, 160, 161, 162, 163, 164, 165, 166, 167, 168, 171, 173, 174, 175, 176, 177, 179, 180, 181, 182, 184, 185, 186, 190, 191, 192, 193, 195, 196, 197, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 220, 221, 222, 223, 224, 225, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 260, 261, 262, 265, 266, 267, 268, 270, 271, 272, 274, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 299, 300, 301, 302, 303, 305, 306, 307, 308, 309, 310, 311, 312, 314, 315, 316, 317, 318, 321, 322, 323, 324, 325, 326, 327, 329, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 343, 344, 345, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 364, 365, 367, 368, 369, 370, 372, 373, 374, 375, 376, 378, 380, 381, 382, 383, 384, 385 and 90623-103607.

11 Haemophilus influenz 2, 3, 5, 6, 7, 8, 9, 10, 13, 15, 19, 20, 21, 22, 25, 26, 27, 30, 31, 32, 33, 34,
ae Rd   37, 38, 40, 41, 45, 46, 48, 49, 50, 51, 52, 53, 55, 62, 63, 64, 66, 67, 68, 73, 78, 81, 83, 84, 85, 88, 90, 91, 92, 98, 101, 105, 106, 111, 116, 117, 119, 122, 123, 124, 125, 126, 134, 138, 144, 146, 149, 151, 152, 155, 156, 160, 161, 164, 165, 166, 169, 171, 172, 174, 176, 177, 179, 180, 183, 190, 197, 198, 199, 200, 201, 203, 205, 207, 208, 211, 213, 214, 218, 221, 223, 226, 228, 229, 234, 236,

239, 240, 242, 244, 247, 248, 251, 254, 255, 256, 259, 262, 263, 264, 271, 272, 274, 277, 279, 281, 282, 283, 295, 296, 299, 302, 305, 306, 308, 311, 312, 313, 316, 317, 318, 319, 322, 323, 324, 325, 326, 327, 329, 333, 335, 338, 339, 340, 343, 344, 345, 348, 351, 353, 354, 356, 365, 368, 371, 375, 377, 379, 380, 385 and 103608-111433.

12 Leptospira interroga 1, 3, 5, 7, 8, 10, 13, 19, 22, 25, 32, 38, 39, 41, 48, 49, 52, 67, 71, 73, 84, ns serovar lai str. 85, 90, 91, 93, 95, 117, 124, 128, 164, 174, 178, 179, 187, 190, 192, 193, 203, 56601   207, 225, 226, 227, 229, 238, 244, 247, 250, 256, 257, 258, 259, 262, 272, 279, 295, 298, 299, 303, 306, 307, 316, 324, 327, 333, 338, 340, 344, 348, 376, 379, 384 and 111434-116384.

13 Listeria monocytogen 5, 6, 7, 8, 9, 10, 13, 22, 36, 40, 48, 52, 67, 84, 90, 91, 95, 114, 116, 147, es EGD-e   185, 214, 244, 247, 248, 253, 254, 259, 262, 272, 276, 279, 299, 306, 308, 324, 333, 340, 355, 382 and 116385-119434.

14 Mycobacterium avium 1, 3, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, subsp. paratuberculo 25, 26, 27, 29, 31, 32, 33, 34, 37, 42, 43, 44, 45, 46, 47, 50, 51, 53, 54, 55, sis   58, 59, 60, 61, 62, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 84, 86, 87, 88, 89, 90, 91, 94, 96, 97, 99, 100, 101, 102, 103, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 119, 120, 121, 122, 123, 125, 127, 130, 131, 132, 133, 135, 137, 138, 139, 140, 142, 143, 144, 146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 160, 161, 162, 164, 165, 166, 167, 168, 170, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181, 183, 184, 185, 188, 189, 190, 191, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 207, 210, 211, 214, 215, 216, 218, 219, 220, 222, 225, 226, 230, 231, 233, 234, 236, 237, 239, 241, 242, 243, 244, 245, 248, 250, 251, 252, 253, 254, 257, 262, 263, 264, 265, 266, 268, 271, 272, 274, 277, 278, 280, 281, 282, 283, 285, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 305, 306, 310, 312, 313, 314, 318, 320, 321, 323, 324, 325, 327, 329, 331, 332, 333, 334, 335, 336, 337, 341, 342, 345, 346, 347, 349, 351, 352, 353, 355, 356, 357, 358, 360, 361, 362, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 380, 381, 382, 383, 384 and 119435-127918.

15 Mycobacterium bovis 1, 3, 4, 5, 6, 7, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, subsp bovis AF2122/9 26, 27, 28, 29, 31, 32, 33, 36, 37, 39, 41, 42, 43, 45, 46, 47, 48, 50, 51, 52, 7   53, 54, 55, 57, 58, 59, 60, 61, 62, 64, 65, 66, 67, 68, 69, 70, 71, 73, 75, 76, 77, 78, 79, 80, 83, 84, 86, 87, 88, 89, 90, 91, 93, 96, 97, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 125, 127, 130, 131, 132, 133, 134, 135, 137, 138, 139, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 165, 166, 167, 168, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 183, 184, 185, 188, 189, 190, 191, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 210, 211, 212, 213, 214, 215, 216, 218, 219, 220, 222, 225, 230, 231, 233, 236, 237, 239, 240, 241, 242, 243, 244, 245, 246, 250, 251, 252, 253, 254, 255, 256, 257, 261, 262, 263, 264, 265, 266, 267, 268, 270, 271, 273, 276, 277, 278, 280, 281, 282, 283, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 296, 297, 299, 300, 302, 303, 304, 305, 306, 308, 310, 312, 313, 314, 315, 318, 320, 321, 322, 323, 324, 325, 326, 327, 329, 330, 331, 332, 333, 334, 335, 336, 337, 341, 342, 345, 346, 347, 348, 349, 350, 351, 352, 353, 355, 356, 357, 358, 360, 361, 362, 364, 365, 366, 367, 369, 370, 371, 372, 373, 374, 375, 376, 378, 380, 381, 382, 383, 384, 385 and 127919-137561.

16 Mycobacterium leprae 3, 4, 5, 6, 7, 12, 13, 14, 15, 18, 19, 21, 22, 23, 24, 26, 29, 31, 32, 33, 36,

37, 39, 41, 42, 43, 45, 46, 47, 48, 49, 50, 53, 54, 57, 59, 62, 65, 68, 69, 70, 71, 73, 74, 75, 76, 78, 81, 83, 84, 86, 90, 94, 96, 98, 101, 103, 106, 107, 109, 110, 111, 112, 113, 114, 115, 116, 118, 119, 120, 121, 123, 131, 133, 134, 135, 137, 142, 143, 144, 145, 146, 147, 149, 154, 156, 157, 158, 159, 161, 162, 163, 165, 166, 167, 171, 172, 173, 174, 175, 176, 179, 183, 184, 185, 187, 188, 189, 190, 193, 196, 197, 198, 199, 200, 201, 202, 204, 205, 206, 211, 212, 214, 215, 216, 218, 219, 220, 221, 223, 224, 225, 228, 230, 231, 232, 233, 234, 235, 236, 237, 241, 242, 243, 245, 249, 250, 251, 253, 254, 256, 258, 261, 263, 265, 267, 268, 269, 271, 274, 276, 277, 280, 281, 284, 288, 289, 290, 291, 293, 294, 295, 296, 297, 299, 300, 301, 302, 303, 305, 306, 307, 309, 310, 311, 312, 313, 314, 315, 318, 320, 321, 323, 324, 327, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 343, 345, 346, 347, 348, 349, 353, 355, 356, 357, 358, 360, 361, 364, 365, 368, 369, 370, 371, 372, 374, 375, 376, 377, 378, 380, 381, 382, 383 and 137562-144598.

17 Mycobacterium tuberc 4, 5, 6, 7, 10, 13, 17, 20, 22, 23, 24, 25, 27, 31, 32, 33, 45, 46, 51, 53, 55,
    ulosis CDC1551   62, 67, 69, 73, 84, 88, 90, 91, 99, 100, 102, 103, 105, 107, 113, 114, 116, 120, 137, 143, 146, 148, 149, 152, 155, 156, 160, 161, 165, 166, 168, 177, 179, 180, 185, 190, 198, 199, 200, 203, 205, 207, 208, 211, 213, 214, 215, 216, 218, 219, 225, 233, 236, 239, 242, 244, 257, 262, 264, 271, 272, 274, 281, 282, 289, 291, 292, 294, 299, 303, 305, 306, 312, 313, 323, 324, 325, 327, 329, 332, 333, 337, 341, 345, 346, 352, 353, 356, 381, 383 and 144599-146806.

18 Mycobacterium tuberc 1, 3, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,
    ulosis H37Rv   25, 26, 27, 28, 29, 31, 32, 33, 37, 39, 41, 42, 43, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 73, 75, 76, 77, 78, 79, 80, 83, 84, 86, 87, 88, 89, 90, 91, 93, 94, 96, 97, 99, 100, 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 125, 127, 130, 131, 132, 133, 134, 135, 137, 138, 139, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 165, 166, 167, 168, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 183, 184, 185, 188, 189, 190, 191, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 210, 211, 212, 213, 214, 215, 216, 218, 219, 220, 222, 225, 230, 231, 233, 234, 236, 237, 239, 240, 241, 242, 243, 244, 245, 246, 250, 251, 252, 253, 254, 255, 256, 257, 261, 262, 263, 264, 265, 266, 267, 268, 270, 271, 272, 273, 274, 276, 277, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 296, 297, 298, 299, 300, 302, 303, 304, 305, 306, 308, 310, 312, 313, 314, 315, 318, 320, 321, 323, 324, 325, 326, 327, 329, 330, 331, 332, 333, 334, 335, 336, 337, 341, 342, 345, 346, 347, 348, 349, 350, 351, 352, 353, 355, 356, 357, 358, 360, 361, 362, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 378, 380, 381, 382, 383, 384, 385 and 146807-155497.

19 Neisseria meningitid 56, 142, 218, 287, 316, 327, 351, 355, 365, 381 and 155498-155833.
    is MC58

20 Neisseria meningitid 1, 6, 7, 8, 10, 12, 15, 17, 21, 22, 26, 28, 30, 37, 39, 40, 45, 49, 52, 56, 58,
    is Z2491   60, 62, 63, 67, 70, 76, 86, 89, 90, 91, 96, 98, 102, 103, 105, 107, 108, 109, 111, 112, 113, 114, 115, 122, 123, 124, 125, 126, 127, 133, 138, 141, 142, 143, 145, 147, 148, 149, 152, 157, 158, 164, 165, 166, 170, 171, 175, 176, 178, 181, 183, 187, 189, 197, 203, 217, 218, 219, 220, 221, 222, 225, 229, 230, 231, 237, 239, 243, 245, 247, 248, 251, 253, 254, 256, 257, 258, 259, 264, 265, 268, 273, 281, 282, 283, 285, 287, 289, 290, 293, 294, 295, 297, 300, 302, 306, 308, 314, 315, 316, 319, 321, 322, 325, 327, 329, 332, 333, 334, 338, 340, 341, 344, 346,

348, 349, 350, 351, 354, 355, 356, 365, 371, 372, 375, 376, 380, 381, 382, 384
and 155834-160603.

21 Pseudomonas aerugino 1, 2, 6, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28,
sa PA01   29, 30, 31, 33, 34, 35, 36, 37, 41, 42, 43, 45, 46, 48, 49, 50, 52, 54, 55, 56,
57, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 73, 76, 77, 78, 79, 81,
82, 83, 84, 86, 87, 88, 89, 90, 91, 94, 95, 96, 97, 99, 100, 101, 102, 103, 105,
106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 118, 119, 120, 121, 122,
123, 124, 125, 126, 127, 130, 131, 134, 137, 138, 139, 140, 141, 142, 144, 147,
149, 150, 151, 152, 154, 155, 156, 157, 158, 160, 161, 162, 163, 164, 165, 166,
167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181, 183, 184,
185, 188, 190, 192, 193, 194, 195, 196, 197, 202, 204, 205, 208, 210, 211, 212,
213, 214, 215, 216, 218, 220, 222, 225, 228, 229, 230, 231, 232, 233, 236, 237,
241, 242, 243, 244, 250, 251, 253, 258, 262, 264, 265, 266, 267, 268, 270, 271,
272, 273, 274, 276, 277, 280, 281, 282, 283, 285, 286, 287, 288, 289, 290, 291,
292, 293, 294, 296, 297, 298, 299, 300, 301, 302, 306, 312, 314, 318, 319, 320,
321, 323, 324, 325, 327, 329, 330, 331, 333, 334, 335, 336, 339, 340, 341, 342,
343, 345, 347, 348, 349, 350, 351, 352, 353, 355, 356, 357, 358, 360, 361, 362,
364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 378, 380, 381,
382, 383, 384 and 160604-170274.

22 Pseudomonas putida K 1, 5, 7, 9, 10, 11, 12, 13, 14, 16, 18, 19, 23, 24, 25, 26, 27, 28, 29, 31, 33,
T2440   34, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 57,
58, 59, 61, 64, 65, 66, 68, 69, 70, 71, 73, 76, 84, 85, 86, 88, 89, 91, 94, 98,
99, 101, 102, 103, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 117,
118, 119, 120, 121, 122, 123, 125, 126, 131, 132, 133, 134, 135, 137, 138, 140,
141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156,
157, 158, 159, 160, 161, 162, 163, 164, 166, 167, 168, 171, 172, 173, 174, 175,
176, 177, 179, 180, 181, 183, 184, 185, 187, 190, 191, 193, 195, 196, 197, 202,
204, 205, 207, 211, 212, 214, 215, 216, 220, 221, 222, 225, 228, 229, 230, 231,
232, 233, 234, 236, 237, 240, 241, 242, 243, 244, 248, 250, 251, 253, 255, 258,
264, 265, 266, 267, 270, 271, 272, 274, 276, 277, 280, 281, 282, 283, 284, 285,
287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302,
303, 304, 305, 306, 308, 310, 312, 313, 314, 316, 317, 318, 320, 321, 322, 323,
324, 327, 329, 333, 334, 335, 336, 337, 342, 343, 345, 346, 347, 348, 349, 350,
351, 352, 353, 354, 355, 356, 357, 358, 360, 361, 364, 365, 366, 367, 368, 369,
370, 371, 373, 374, 375, 376, 377, 378, 380, 381, 382, 383, 384, 385 and
170275-178543.

23 Rickettsia prowazeki 2, 10, 13, 25, 27, 31, 33, 45, 46, 48, 52, 55, 62, 67, 71, 73, 75, 81, 84, 91,
i   95, 99, 100, 105, 113, 124, 131, 152, 154, 155, 156, 157, 160, 162, 166, 177,
179, 180, 181, 190, 192, 204, 205, 208, 213, 214, 217, 218, 222, 231, 236, 239,
242, 244, 262, 265, 270, 271, 272, 274, 278, 287, 288, 289, 293, 294, 299, 305,
306, 323, 324, 325, 327, 333, 334, 340, 345, 353, 356, 373, 381 and
178544-179914.

24 Salmonella enterica 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26,
enterica serovar Typ 27, 28, 30, 31, 32, 33, 35, 37, 38, 39, 40, 42, 43, 45, 46, 47, 48, 49, 50, 51,
hi   52, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75,
77, 79, 80, 81, 83, 84, 86, 88, 89, 90, 91, 92, 94, 95, 98, 99, 100, 101, 102,
105, 106, 107, 108, 109, 111, 112, 113, 114, 115, 116, 119, 120, 121, 122, 123,
124, 125, 126, 127, 129, 131, 132, 133, 135, 136, 137, 138, 142, 143, 144, 145,
146, 147, 148, 150, 152, 153, 154, 155, 156, 157, 158, 160, 161, 162, 163, 164,
165, 166, 167, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181, 182, 183, 185,

187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205, 206, 208, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222,
223, 225, 226, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241,
242, 243, 244, 245, 247, 248, 250, 251, 252, 253, 254, 255, 256, 257, 260, 261,
262, 263, 265, 266, 269, 270, 271, 272, 274, 276, 277, 278, 280, 281, 282, 283,
284, 285, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300,
301, 302, 303, 304, 305, 306, 308, 311, 312, 314, 315, 318, 319, 323, 324, 325,
327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 339, 340, 341, 342, 343,
344, 345, 346, 347, 348, 349, 351, 352, 353, 354, 355, 356, 357, 358, 360, 361,
364, 365, 366, 367, 369, 370, 371, 373, 374, 375, 376, 378, 379, 380, 381, 382,
383, 384, 385 and 179915-190940.

25 Salmonella enterica 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25,
enterica serovar Typ 26, 27, 28, 30, 31, 32, 33, 35, 37, 38, 39, 40, 42, 43, 45, 46, 47, 48, 49, 50,
hi Ty2   51, 52, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73,
75, 77, 79, 80, 81, 83, 84, 85, 86, 88, 89, 90, 91, 94, 95, 98, 99, 100, 101,
102, 105, 106, 107, 108, 109, 111, 112, 113, 114, 115, 116, 119, 120, 121, 122,
123, 124, 125, 126, 127, 129, 131, 132, 133, 135, 136, 137, 138, 142, 143, 144,
145, 146, 147, 148, 150, 152, 153, 154, 155, 156, 157, 158, 160, 161, 162, 163,
164, 165, 166, 167, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181, 182, 183,
185, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201,
202, 203, 204, 205, 206, 208, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221,
222, 223, 225, 226, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240,
241, 242, 243, 244, 245, 247, 248, 250, 251, 252, 253, 254, 255, 256, 257, 260,
261, 262, 263, 265, 266, 269, 270, 271, 272, 274, 276, 277, 278, 280, 281, 282,
283, 284, 285, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299,
300, 301, 302, 303, 304, 305, 306, 308, 311, 312, 314, 315, 318, 319, 323, 324,
325, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341,
342, 343, 344, 345, 346, 347, 348, 349, 351, 352, 353, 354, 355, 356, 357, 358,
360, 361, 364, 365, 366, 367, 369, 370, 371, 373, 374, 375, 376, 378, 379, 380,
381, 382, 383, 384, 385 and 190941-201927.

26 Salmonella typhimuri 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24,
um LT2   25, 26, 27, 28, 29, 30, 31, 32, 33, 36, 37, 38, 39, 42, 43, 45, 46, 47, 48, 49,
50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71,
72, 73, 75, 77, 79, 82, 83, 84, 86, 88, 89, 90, 91, 94, 95, 96, 100, 101, 102,
103, 104, 105, 107, 108, 109, 111, 112, 113, 114, 115, 116, 119, 120, 121, 122,
123, 124, 125, 126, 127, 129, 131, 132, 133, 135, 137, 138, 142, 143, 144, 145,
146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 160, 161, 162, 163,
164, 165, 166, 167, 168, 170, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181,
182, 183, 185, 187, 188, 189, 190, 192, 193, 194, 195, 196, 197, 198, 199, 200,
201, 202, 203, 204, 205, 206, 207, 208, 211, 212, 213, 214, 215, 216, 217, 218,
219, 220, 221, 222, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236,
237, 238, 239, 240, 241, 242, 243, 244, 245, 247, 248, 249, 250, 251, 252, 253,
255, 256, 257, 258, 260, 261, 262, 263, 266, 267, 268, 270, 271, 272, 273, 274,
275, 276, 279, 280, 281, 282, 283, 285, 287, 288, 289, 290, 291, 292, 293, 294,
296, 297, 298, 299, 300, 302, 303, 306, 307, 308, 309, 310, 311, 312, 314, 315,
317, 318, 319, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335,
336, 337, 338, 340, 341, 342, 343, 344, 345, 347, 348, 349, 350, 351, 352, 353,
354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 368, 369, 370,
371, 373, 374, 375, 376, 379, 380, 381, 382, 383, 384, 385 and 201928-215605.

27 Shigella flexneri 2a 1, 2, 5, 6, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27,

str. 2457T   28, 29, 30, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 46, 47, 48, 49, 50, 51,
52, 54, 55, 56, 57, 58, 59, 62, 63, 65, 66, 67, 68, 69, 70, 71, 73, 76, 78, 80,
83, 84, 85, 86, 87, 88, 89, 90, 91, 93, 94, 95, 97, 99, 101, 102, 103, 104, 105,
107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 119, 120, 121, 122, 123,
124, 125, 126, 129, 131, 132, 133, 134, 135, 136, 137, 138, 139, 141, 142, 143,
145, 146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 160, 161, 162,
163, 164, 165, 166, 167, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181, 182,
184, 185, 187, 190, 191, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205,
207, 208, 212, 213, 214, 216, 218, 220, 221, 222, 223, 224, 225, 229, 230, 231,
232, 233, 234, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 247, 248, 250,
251, 252, 253, 254, 255, 256, 257, 260, 261, 262, 263, 265, 268, 270, 271, 272,
274, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 287, 288, 289, 290, 291,
292, 293, 295, 296, 297, 298, 299, 300, 301, 302, 304, 306, 307, 308, 309, 310,
311, 312, 314, 315, 316, 317, 318, 320, 321, 322, 323, 324, 325, 327, 328, 329,
331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 343, 344, 345, 346, 347,
348, 349, 350, 351, 352, 353, 354, 356, 357, 358, 359, 360, 361, 362, 364, 365,
366, 367, 368, 369, 371, 373, 374, 375, 376, 379, 380, 381, 382, 383, 384, 385
and 215606-226197.

28 Shigella flexneri 2a 1, 2, 5, 6, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27,
str. 301   28, 29, 30, 32, 33, 35, 36, 37, 39, 40, 41, 42, 43, 46, 47, 48, 49, 50, 51, 52,
54, 55, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 73, 76, 77, 78,
80, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 97, 99, 101, 102, 103,
104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 119, 120, 121, 122,
123, 124, 125, 126, 129, 132, 133, 134, 135, 136, 137, 138, 141, 142, 143, 144,
145, 146, 147, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 159, 160, 161,
162, 163, 164, 165, 166, 167, 168, 171, 172, 173, 174, 175, 176, 177, 179, 180,
181, 182, 184, 185, 187, 190, 191, 195, 196, 197, 198, 199, 200, 201, 202, 203,
205, 207, 208, 210, 212, 213, 214, 216, 217, 218, 220, 221, 222, 223, 224, 225,
229, 230, 231, 232, 233, 234, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245,
247, 248, 250, 251, 252, 253, 254, 255, 256, 257, 260, 262, 263, 264, 265, 266,
268, 269, 270, 271, 272, 274, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
287, 288, 289, 290, 291, 292, 293, 295, 296, 297, 298, 299, 300, 301, 302, 304,
306, 308, 309, 311, 312, 314, 315, 316, 317, 318, 320, 321, 323, 324, 325, 327,
328, 329, 331, 333, 334, 335, 336, 337, 338, 339, 340, 341, 343, 344, 345, 346,
347, 348, 349, 350, 351, 352, 353, 354, 356, 357, 358, 359, 360, 361, 362, 364,
365, 366, 367, 368, 369, 371, 373, 374, 375, 376, 378, 379, 380, 381, 382, 383,
384, 385 and 226198-237003.

29 Staphylococcus aureu 2, 5, 7, 8, 9, 10, 13, 16, 19, 22, 25, 27, 31, 32, 33, 35, 36, 38, 39, 40, 41,
s subsp. aureus Mu50 45, 46, 47, 48, 50, 51, 52, 55, 62, 63, 67, 71, 73, 81, 83, 84, 85, 90, 91, 92,
93, 95, 98, 100, 101, 105, 106, 111, 113, 116, 119, 120, 124, 131, 133, 138,
139, 146, 147, 149, 152, 153, 156, 160, 161, 162, 165, 166, 169, 171, 172, 174,
177, 179, 180, 181, 190, 192, 203, 204, 205, 207, 208, 213, 214, 217, 218, 222,
228, 231, 232, 236, 238, 240, 242, 244, 245, 247, 248, 252, 254, 256, 259, 261,
262, 270, 271, 272, 274, 275, 287, 293, 294, 299, 301, 302, 305, 306, 308, 309,
311, 316, 317, 323, 324, 325, 326, 327, 332, 333, 334, 335, 337, 339, 340, 342,
343, 344, 345, 346, 348, 349, 351, 353, 354, 356, 363, 365, 368, 371, 375, 379,
381 and 237004-244310.

30 Staphylococcus aureu 2, 5, 7, 8, 10, 13, 16, 19, 22, 25, 27, 30, 31, 32, 33, 38, 39, 40, 41, 45, 46,
s subsp. aureus MW2 47, 48, 50, 51, 52, 55, 62, 63, 67, 71, 72, 73, 78, 81, 83, 84, 90, 91, 92, 93,
95, 98, 100, 101, 105, 106, 109, 111, 113, 117, 119, 120, 124, 126, 128, 130,

131, 133, 134, 138, 139, 143, 149, 152, 153, 156, 160, 161, 162, 166, 169, 171, 172, 174, 177, 179, 180, 181, 182, 190, 192, 203, 204, 205, 207, 208, 213, 214, 217, 218, 222, 228, 231, 232, 236, 238, 242, 244, 247, 248, 252, 254, 256, 257, 259, 261, 262, 271, 272, 274, 279, 287, 293, 294, 295, 299, 301, 302, 306, 307, 308, 309, 315, 316, 323, 324, 325, 326, 327, 332, 333, 334, 335, 337, 338, 339, 342, 343, 344, 345, 346, 348, 350, 351, 353, 356, 363, 365, 368, 371, 375, 379, 381 and 244311-250683.

31 Staphylococcus aureu 2, 5, 7, 8, 9, 10, 13, 16, 19, 22, 25, 27, 31, 32, 33, 35, 36, 38, 39, 40, 41,
    s subsp. aureus N315 45, 46, 47, 48, 50, 51, 52, 55, 62, 63, 67, 71, 73, 81, 83, 84, 85, 90, 91, 92,
                    93, 95, 98, 100, 101, 105, 106, 111, 113, 117, 119, 120, 124, 131, 133, 134,
                    138, 139, 143, 146, 147, 149, 152, 153, 156, 160, 161, 162, 166, 169, 171, 172,
                    174, 177, 179, 180, 181, 190, 192, 203, 204, 205, 207, 208, 213, 214, 217, 218,
                    222, 226, 228, 231, 232, 236, 238, 240, 242, 244, 245, 247, 248, 252, 254, 256,
                    259, 260, 261, 262, 270, 271, 272, 274, 275, 279, 287, 293, 294, 299, 301, 302,
                    305, 306, 307, 308, 309, 311, 316, 317, 323, 324, 325, 326, 327, 332, 333, 334,
                    335, 337, 339, 340, 342, 343, 344, 345, 346, 348, 349, 351, 353, 354, 356, 363,
                    365, 368, 371, 375, 379, 381 and 250684-257140.

32 Streptococcus pneumo 2, 3, 5, 6, 10, 13, 14, 17, 20, 21, 22, 23, 25, 26, 27, 30, 31, 32, 33, 35, 36,
    niae R6   37, 38, 39, 40, 41, 46, 47, 48, 49, 50, 52, 55, 56, 62, 63, 67, 73, 77, 81, 83,
                    84, 85, 87, 90, 91, 92, 94, 95, 100, 101, 102, 105, 106, 111, 112, 114, 115,
                    116, 117, 119, 123, 124, 126, 133, 136, 138, 143, 145, 146, 147, 149, 152, 156,
                    160, 161, 164, 166, 168, 169, 171, 172, 174, 175, 176, 177, 179, 180, 190, 192,
                    203, 204, 205, 208, 209, 213, 214, 217, 218, 223, 226, 228, 229, 232, 233, 235,
                    236, 238, 239, 242, 244, 245, 246, 247, 248, 249, 252, 255, 256, 257, 258, 259,
                    260, 261, 262, 264, 268, 271, 272, 274, 279, 282, 283, 284, 287, 295, 296, 297,
                    298, 299, 300, 302, 303, 305, 306, 307, 309, 311, 312, 314, 315, 316, 320, 321,
                    323, 324, 325, 326, 327, 329, 333, 335, 338, 340, 341, 344, 345, 348, 350, 351,
                    352, 353, 356, 357, 359, 365, 368, 371, 372, 373, 375, 377, 379, 380, 382, 384,
                    385 and 257141-265301.

33 Streptococcus pneumo 2, 10, 13, 25, 27, 33, 46, 48, 50, 52, 55, 62, 63, 67, 73, 81, 84, 91, 101, 105,
    niae TIGR4   106, 111, 119, 149, 152, 160, 161, 164, 166, 168, 169, 171, 172, 175, 176, 177,
                    179, 180, 190, 205, 208, 213, 214, 218, 228, 236, 242, 244, 246, 262, 268, 271,
                    272, 274, 297, 299, 306, 321, 323, 324, 325, 327, 329, 333, 340, 345, 348, 351,
                    353, 356, 359, 365, 368, 371, 372, 375, 380 and 265302-266788.

34 Streptococcus pyogen 3, 5, 8, 10, 21, 22, 25, 27, 32, 37, 38, 39, 40, 43, 49, 90, 95, 96, 106, 116,
    es M1 GAS   126, 129, 138, 163, 164, 168, 175, 176, 180, 226, 232, 244, 246, 259, 261, 262,
                    268, 283, 295, 296, 297, 299, 306, 309, 316, 321, 329, 330, 333, 348, 349, 359,
                    372, 379, 380 and 266789-269521.

35 Streptococcus pyogen 3, 8, 10, 13, 20, 22, 25, 27, 31, 32, 33, 37, 38, 40, 46, 48, 52, 55, 62, 67,
    es MGAS315   73, 84, 90, 91, 105, 106, 113, 116, 129, 138, 152, 160, 164, 166, 168, 175, 176,
                    177, 179, 180, 186, 190, 192, 205, 208, 211, 213, 214, 218, 226, 229, 232, 236,
                    242, 244, 246, 262, 268, 271, 272, 274, 282, 283, 295, 296, 297, 299, 306, 309,
                    312, 321, 323, 324, 325, 327, 329, 333, 340, 345, 348, 349, 353, 356, 359, 372,
                    379, 380, 381 and 269522-272357.

36 Streptococcus pyogen 3, 4, 8, 10, 13, 21, 22, 25, 27, 31, 33, 37, 38, 39, 40, 46, 48, 52, 55, 62, 67,
    es MGAS8232   73, 84, 90, 91, 95, 105, 106, 113, 116, 129, 138, 152, 160, 163, 164, 166, 168,
                    175, 176, 177, 179, 180, 190, 205, 208, 213, 214, 218, 226, 232, 236, 242, 244,
                    246, 247, 259, 260, 261, 262, 268, 271, 272, 274, 295, 296, 297, 299, 306, 307,
                    309, 316, 321, 323, 324, 325, 327, 329, 330, 333, 337, 340, 344, 345, 348, 349,
                    353, 356, 359, 363, 372, 379, 380, 381 and 272358-275553.

37 Streptococcus pyogen 10, 13, 25, 27, 31, 33, 46, 48, 52, 55, 62, 67, 73, 84, 91, 105, 113, 152, 160,
    es SSI-1   164, 166, 168, 175, 176, 177, 179, 180, 190, 205, 208, 213, 214, 218, 236, 242,
                      244, 246, 262, 268, 271, 272, 274, 297, 299, 306, 321, 323, 324, 325, 327, 329,
                      333, 340, 345, 348, 353, 356, 359, 372, 380, 381 and 275554-276703.
38 Treponema pallidum s 3, 10, 13, 48, 52, 57, 59, 67, 81, 84, 86, 90, 91, 121, 131, 134, 174, 175, 176,
    ubsp. pallidum str. 184, 218, 228, 231, 235, 236, 243, 261, 262, 269, 272, 289, 291, 295, 299, 306,
    Nichols   312, 324, 329, 332, 333, 340, 345, 356, 358 and 276704-277654.
39 Yersinia pestis   1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 16, 18, 19, 21, 22, 25, 26, 27, 28, 29,
                      30, 31, 32, 33, 34, 36, 37, 39, 40, 41, 42, 43, 45, 46, 47, 48, 51, 52, 53, 54,
                      55, 57, 58, 61, 62, 63, 67, 68, 70, 71, 73, 75, 76, 78, 82, 84, 85, 87, 88, 89,
                      90, 91, 93, 94, 95, 98, 99, 101, 102, 103, 105, 106, 107, 108, 111, 112, 113,
                      114, 115, 116, 117, 120, 121, 122, 123, 124, 125, 126, 129, 130, 131, 132, 133,
                      134, 135, 136, 138, 140, 141, 142, 143, 146, 148, 149, 151, 152, 153, 154, 155,
                      156, 160, 164, 165, 166, 167, 169, 171, 172, 174, 175, 176, 177, 178, 179, 180,
                      182, 184, 186, 187, 188, 190, 191, 192, 193, 196, 197, 198, 199, 200, 201, 202,
                      203, 205, 206, 208, 209, 211, 213, 214, 215, 217, 218, 219, 220, 221, 222, 224,
                      225, 226, 227, 229, 230, 232, 233, 234, 236, 237, 238, 239, 240, 241, 242, 243,
                      244, 245, 250, 251, 252, 253, 255, 256, 257, 258, 259, 260, 262, 263, 264, 270,
                      271, 272, 274, 276, 279, 280, 281, 282, 283, 286, 287, 289, 291, 292, 293, 295,
                      296, 298, 299, 300, 301, 302, 304, 306, 307, 308, 309, 311, 314, 315, 317, 319,
                      321, 322, 323, 324, 325, 326, 327, 329, 330, 331, 333, 334, 335, 336, 337, 340,
                      341, 342, 343, 344, 345, 346, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357,
                      358, 359, 363, 364, 365, 367, 368, 370, 372, 373, 374, 376, 377, 378, 379, 380,
                      381, 382, 383, 384 and 277655-287825.
40 Yersinia pestis KIM 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 16, 18, 19, 20, 21, 22, 25, 26, 27, 28,
                      29, 31, 32, 33, 34, 36, 37, 39, 40, 41, 42, 43, 45, 46, 47, 48, 51, 52, 53, 54,
                      55, 57, 58, 61, 62, 63, 65, 67, 68, 70, 71, 72, 73, 75, 76, 78, 84, 85, 87, 88,
                      89, 90, 91, 93, 94, 95, 97, 99, 101, 102, 103, 105, 106, 107, 108, 111, 112,
                      113, 114, 115, 117, 118, 120, 121, 122, 123, 124, 125, 126, 129, 130, 131, 132,
                      133, 134, 135, 136, 138, 140, 142, 143, 146, 147, 148, 149, 151, 152, 153, 154,
                      156, 158, 160, 164, 165, 166, 169, 171, 172, 174, 175, 176, 177, 178, 179, 180,
                      182, 186, 187, 188, 190, 191, 192, 193, 196, 197, 198, 199, 200, 201, 202, 203,
                      205, 206, 207, 208, 209, 211, 213, 214, 215, 217, 218, 220, 221, 222, 224, 225,
                      226, 227, 229, 230, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243,
                      244, 247, 248, 250, 251, 252, 253, 255, 256, 257, 258, 260, 262, 263, 264, 270,
                      271, 272, 274, 276, 279, 281, 282, 283, 284, 286, 287, 288, 289, 291, 292, 293,
                      294, 295, 296, 298, 299, 300, 302, 303, 305, 306, 307, 308, 309, 311, 314, 315,
                      317, 318, 319, 321, 322, 323, 324, 325, 327, 329, 330, 331, 333, 334, 335, 336,
                      337, 340, 341, 342, 343, 344, 345, 346, 348, 349, 350, 351, 352, 353, 354, 355,
                      356, 357, 358, 359, 362, 363, 364, 365, 367, 368, 370, 373, 374, 375, 376, 377,
                      378, 379, 380, 381, 382, 383, 384, 385 and 287826-298021.